# **Networks & Engineering SC Meeting**

16:00-17:00 Tuesday 3<sup>rd</sup> October (Room 240)

ILRS Technical Workshop, Riga

# **NESC Agenda**

- Networks and Engineering SC Forum
- Summary of updates to the ILRS Site Log
  - presentation by Randy Ricklefs
- SLR tracking of decommissioned ILRS targets
- Discussion: Priorities for the NESC

### **NESC Forum**



- The NESC forum has 73 members
- Other stats:

Total Posts:	62
Total Topics:	24
Total Categories:	4
Total page views:	153459 (???!)

Activity on the forum was very quiet in recent months.
It increased in the run up to the Workshop and after email reminders.

## **NESC Forum**



- How can NESC members increase activity?
  - Invite your colleagues to sign up
  - Think of a new topic of interest and post it
  - Reply to posts
  - What else??

## **NESC Forum**

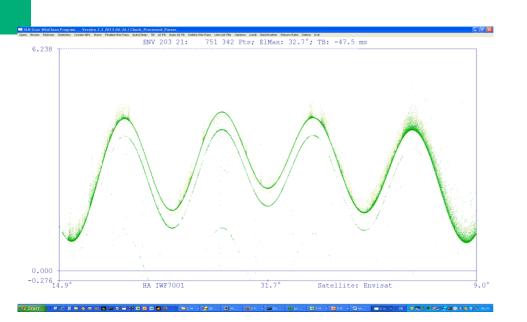


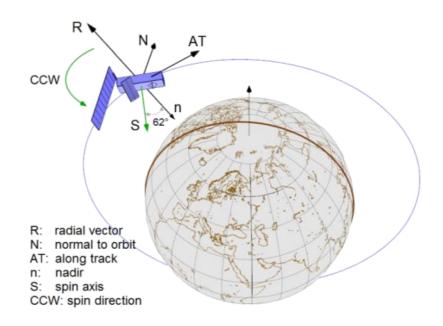
- Activity should breed more activity and interest, so try to post something. This could be:
  - An update about your station (especially if you've an upgrade underway)
  - A link to a website/report/paper of interest
  - A question to the community
- A new "Photograph Wall" section has just been added

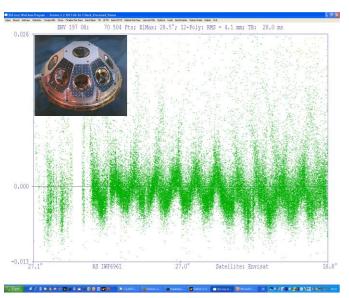
## **NESC**

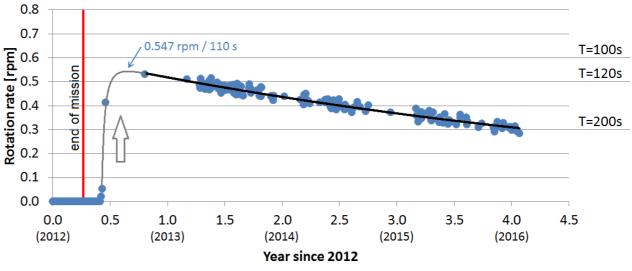
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#### 2 kHz Laser Ranging to ENVISAT: Spin: > 200 s; few meters



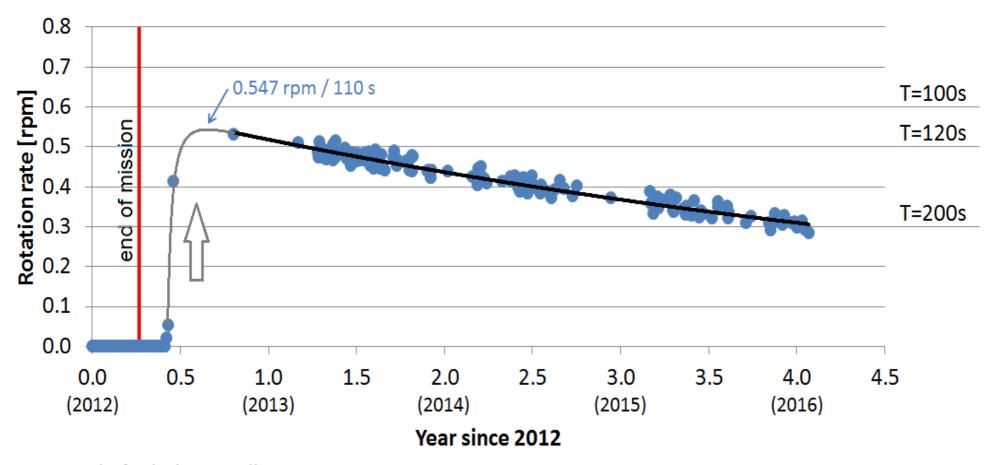






- end of mission: April 8, 2012
- spin up period: June 3 Aug. 10, 2012 (~2 months), max spin rate = 0.547 rpm (T=110 s)
- exponential loss of rotational energy

### ENVISAT: developed unexpected spin after end of mission



- end of mission: April 8, 2012
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## **NESC**

#### SLR tracking of decommissioned ILRS targets

- Usually, SLR tracking stops immediately; BUT
- For selected targets, we should continue SLR tracking on a very reduced priority level, to determine attitude, and the begin of attitude motions => this was completely missed e.g. with ENVISAT
- It offers valuable additional contributions of SLR:
  - Science: e.g. insight into effects of solar radiation pressure
  - POD: Inclusion of attitude / attitude motion => better OD
- This additional workload is minimal:
  - A few passes per week or so would be completely sufficient ...
  - A few participating SLR stations also would be sufficient ...

## **NESC Priorities**

 What should be the top priorities and areas of focus for the Networks and Engineering SC?

### Suggestions:

- Systematic Bias. Building on previous surveys by email and the outcomes from Workshop Session 3: Accuracy and scheduling, could the NESC compile all known potential sources of systematic range error?
- New technique development. Stations are involved in time-transfer, space debris, laser communications etc.
- Site surveying. Is this being carried out by all stations as well as could be?
- Greater network collaboration and cooperation. Is the NESC Forum the best way to support the network? or is there something else we should do?